DOCUMENT RESUME

ED 041 577 JC 700 187

AUTHOR Losak, John; And Others
TITLE Psychological Characteristics of the Academicall Underprepared Student.
INSTITUTION Miami-Dade Junior Coll., Fla.
PUB DATE Dec 69
NOTE 62p.

EDRS PRICE EDRS Price MF-$0.50 HC-$3.20
DESCRIPTORS *Academically Handicapped, Institutional Research, *Junior Colleges, *Psychological Characteristics, *Psychological Evaluation, *Student Adjustment, Student Characteristics
IDENTIFIERS Bender Visual Motor Gestalt Test, *Florida, House-Tree-Person Projective Test, Wechsler Adult Intelligence Scale

ABSTRACT

Data on the cognitive and emotional functioning of selected students were gathered to develop a research description of them from which the potential academic and vocational levels of attainment of similar students could be estimated. The experimental group was made up of 57 males and females of various racial backgrounds, who scored at or below the twenty-first percentile on the verbal section of the School and College Ability Test (SCAT) Form 1A. To provide psychological data, each student completed the Wechsler Adult Intelligence Scale (WAIS), Bender Visual Motor Gestalt Test, and the House-Tree-Person Projective Test. Among the findings suggested by the data are: (1) 93 per cent of the population obtained a full scale WAIS IQ of average of above; (2) a high percentage of the population needs some form of counseling or psychotherapy to help them cope with psychological conflicts, thus increasing chances of realizing their maximum potential; and (3) at least 26 per cent of those currently enrolled were judged not to have the intellectual and emotional integration to profit much from this experience unless necessary modifications in the present curriculum structure are provided to meet their needs. As a result of these findings, the authors suggest the development of new approaches for gathering and sorting data on which to group students and the introduction of educational experiences that emphasize attention to personal problems. (JO)

ED041577

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

PSYCHOLOGICAL CHARACTERISTICS OF THE ACADEMICALLY UNDERPREPARED STUDENT

John Losak
Thomas Jefferson
Constance Sutton

Miami-Dade Junior College, North Campus

HWP49125

December, 1969

JC 700 187

UNIVERSITY OF CALIF.
LOS ANGELES

AUG 27 1970

CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

12p.

ABSTRACT

The purpose of this study was to gather data which would describe that group of students at Miami-Dade Junior College, North Campus, who score at or below the twenty-first percentile on the Verbal section of the School and College Ability Test, Form 1A.

The population for the study (N = 57) consisted of full-time entering freshmen (12 credit hours or more) who were enrolled in English 090 (Remedial Reading and Writing) and Orientation 101 during the Fall Term, 1967. There were 34 males (6 of Latin background, 4 Negro, and 24 Caucasian) and 23 females (17 Negro and 6 Caucasian).

A battery of psychological tests was administered to the 57 students on an individual basis by two clinical psychologists. The test battery consisted of the Wechsler Adult Intelligence Scale, the Bender Visual Motor Gestalt Test, and the House-Tree-Person Projective Test. The data on each of the students were evaluated by four persons with training and experience in the use of psychological tests and reported on a modification of the National Institute of Dental Research Form, DE-01836.

Aside from the fact that each individual scored at or below the twenty-first percentile on an achievement test, the findings revealed that any homogeneity of the population is illusory. Although 93 per cent of the population obtained a Full Scale I.Q. of Average or above, there were wide differences on subtest scores. In addition to those intra-individual differences, there were also inter-group differences with respect to sex and ethnic background.

The percentage of males scoring Average or above was greater than female subjects. Of the seventeen Negro females, four scored below Average.

Estimates of intellectual potential were made by group judgment of four persons with training and experience in the use of psychological tests. When their estimates were compared with obtained I.Q. scores, there was a general trend for individuals to be placed into higher intellectual classifications. In actuality, 60 per cent of those without suspected brain damage were placed into higher categories.

Approximately three-fourths of the population were judged to exhibit personality and emotional adjustment problems of varying degree. Anxiety and ego defects as defined in the Clinical Evaluation Form constituted the specific psychological factors which appear to be related to successful or unsuccessful handling of college work.

The data supplied useful information for making judgments of potential academic and vocational levels of attainment. These judgments were made through a balancing of cognitive and emotional functioning. Even though all of the subjects were enrolled in a junior college at the time of the study, at least 26 per cent were judged not to have the intellectual or emotional integration to successfully profit from this experience unless modifications in the present curriculum structure are provided to meet these student needs.

Based on the findings of this study, it is suggested that:

1. New approaches need to be considered in gathering and sorting out information on which to "group" students. One such

approach is through differential diagnosis and placement.

2. Educational experiences with a strong emphasis in the affective realm need to be developed in order to produce a significant difference in the chance for success of the individual over and above that accruing from traditional methods which emphasize only the cognitive realm.

ACKNOWLEDGMENTS

The idea for this study originated from a concern for the plight of the academically underprepared student who matriculates at Miami-Dade Junior College, North Campus. Several persons provided assistance during the discussion of the research design, collection and interpretation of data, and preparation of the manuscript for publication.

First, we wish to express appreciation to Mr. Ambrose Garner, Vice President of North Campus, and to Dr. Mary-Jeanette Taylor, Dean of Student Personnel Services, for supporting and encouraging this study. We are especially indebted to Dr. Rubye Beal, to Mr. Frank Digges, and Mr. Gus Wenzel for their valuable suggestions during the initial stages of the study.

Our sincere appreciation goes to Dr. Norman Reichenberg for services rendered beyond those for which he received remuneration. His clinical judgments, along with those of Mr. Neil Burns, were invaluable during the collection and interpretation of test results.

We wish to express our gratitude to Mrs. Patricia Baker and Miss Ellie Maney for editing and preparing the manuscript for publication. We are also appreciative of all assistance and encouragement given by the faculty and clerical staff of the Division of Counseling, Testing, and Research at Miami-Dade Junior College, North Campus.

Finally, we gratefully acknowledge and sincerely thank the students who agreed to participate in this study.

TABLE OF CONTENTS

Page

ABSTRACT ii

ACKNOWLEDGMENTS. v

LIST OF TABLES vii

INTRODUCTION 1

Problem 2

PROCEDURE 3

Population 3

Data Gathering Sources 3

Method 5

RESULTS. 8

DISCUSSION 35

SUMMARY AND RECOMMENDATIONS. 41

APPENDIX 45

Participation Agreement. 47

Clinical Evaluation Form 48

REFERENCES 55

LIST OF TABLES

Page

Distribution of Intelligence Quotients as Measured by Wechsler Adult Intelligence Scale 9

Distribution of Intelligence Quotients By Sex As Measured by WAIS. . . 11

Distribution of Intelligence Quotients as Measured by WAIS For Males According to Ethnic Background 13

Distribution of Intelligence Quotients as Measured by WAIS for Females According to Ethnic Background 15

Judgment of Psychological Impairment Related to Organic Brain Damage . 16

Judgment of Anxiety as a Variable in Personality and Emotional Functioning. 18

Judgment of Ego Defects as a Variable in Personality and Emotional Functioning. 20

Judgment of Overall Personality and Emotional Adjustment 22

Judgment of Competitive Potential in Academic/Vocational Areas, Under Reasonably Ideal Circumstances 24

Estimated Intellectual Potential Assuming Good Emotional Maturity. . . 26

Judgment of Potential Levels of Academic Achievement 28

Judgment of Maximum Future Vocational Level of Achievement 30

Recommendations Regarding Future Academic and/or Vocational Training . 32

Recommendations Regarding Need For Counseling or Psychotherapy 34

INTRODUCTION

Miami-Dade Junior College, one of the nation's largest urban public-supported community junior colleges, is confronted with an ever-increasing number of students. With an open-door policy, the College attracts students representing a wide range of academic potential and achievement, and environmental background. Records of the College indicate: (1) the number and percentage of entering students scoring at or below the twenty-first percentile on the School and College Ability Test have increased since the Fall Term of 1964; (2) only a small percentage of these students complete a program of study at the College.

At the time of the study, students who scored at or below the twenty-first percentile on the Verbal section of the School and College Ability Test, Form 1A, were placed in English 090, a course designed to provide remediation in reading and writing. The only exception to this practice was placement of the foreign[1] student in Speech 150, a course designed to improve his proficiency in speaking and writing the English language.

A recent evaluation of selected aspects of the remedial program revealed that the program does not produce any meaningful differences in the academic performance of students who participated.[2] This

---

[1] A foreign student, as defined for this study, is one whose parents speak a native tongue other than English and who has been in the public school system for less than three years.

[2] John G. Losak, "An Experiment Designed to Evaluate a Program Developed to Aid the Academically Underprepared Junior College Student" (unpublished Ph.D. dissertation, Florida State University, 1969).

evaluation, along with organizational dissatisfactions with the remedial program, has resulted in the College questioning its utilization of resources in meeting the needs of students who, according to their poor test performance, are academically underprepared.

The need for adequate data on such students is great, since one hypothesis of this study is that differences in the make-up of individuals within this group are important variables in determining their success or failure in college. It is further hypothesized that knowledge of these variables would be helpful in improving curriculum planning, placement, and teaching techniques.

PROBLEM

The general purpose of the study was to gather sufficient information and data which could be synthesized into a detailed description of academically underprepared students. In this study, such students are defined as those who score at or below the twenty-first percentile on the Verbal section of the School and College Ability Test, Form 1A.

The specific concerns of the study were as follows:

1. To identify variables (emotional problems, language barriers, intellectual limitations, etc.) that may contribute to a student's lack of success at Miami-Dade Junior College.
2. To recommend some general approaches to curriculum innovations for the College to consider in working with academically underprepared students.

PROCEDURE

POPULATION

Students selected for this descriptive study has to meet the following criteria:

1. Score 22 or below (raw score) on the Verbai section of the School and College Ability Test, Form 1A.
2. Enroll in English 090 and Orientation 101 during the Fall Term, 1967.
3. Be first-time-in-college freshmen who registered for 12 or more credit hours.

DATA GATHERING SOURCES

Chosen for detailed analysis in this study, was a basic battery of tests employed by many clinical psychologists in the assessment of personality and intellect of clients or patients in hospitals and clinics throughout the country. The battery consisted of the following tests:

1. Wechsler Adult Intelligence Scale (WAIS)

   This is an individual test of intellectual ability developed for adults, containing a Verbal Scale and a Performance Scale, and yielding individual scores on each scale plus a Full Scale I.Q. which consists of the Verbal and Performance scores combined.

There are eleven subtest scores, six in the Verbal Scale and five in the Performance Scale.

2. Bender Visual Motor Gestalt Test

This test consists of nine simple geometric patterns presented individually to the person to be examined for copying. It has been used to explore retardation, loss of functioning and organic brain defects in children and adults, and to explore personality deviations.

3. House-Tree-Person Projective Test

This test requires a person to draw on individual sheets of 8½ x 11 inch paper a House, Tree, and Person in that order. Some modifications of the test require that a second drawing of a Person (of the sex opposite that of the first figure drawn) and a "free" drawing be made, making a total of five drawings. Such drawings are believed to stimulate both conscious and unconscious associations. Drawings are analyzed and inferences are made regarding the client's personality structure, emotional life, needs, etc.

METHOD

At the beginning of the Fall Term, 1967, four sections of the Orientation 101 (ORI)[1] classes were designated for students who were to become a part of the sample population selected for participation in the study. During registration, an attempt was made to direct all students who met the criteria for the descriptive study into one of these classes. To insure a representative population, these four classes were scheduled in different time blocks.

During one of the first meetings of the ORI classes, a counselor spoke to the students and solicited their participation in the study. Volunteers were requested to report to another room where a more detailed explanation was made. Each volunteer was asked to sign a Participation Agreement Form[2], one copy of which was given to the student while another copy was retained by the College. Of approximately 100 students who initially volunteered, 57 completed all of the testing. No follow-up was made on the students who did not complete testing.

Each student was enrolled in English 090 and was scheduled for a 50-minute reading laboratory period. During this time period and an unscheduled hour before or after the laboratory period, students in the population were scheduled for psychological testing in two-hour

---

[1] Orientation 101 is a one-credit course required of all full-time (12 credit hours or more) entering freshmen. It is designed to present information about the College and its services and to assist students in realizing their academic, vocational, and personal potential.

[2] The Participation Agreement Form is reproduced in the Appendix.

time blocks. Tests were administered by two certified clinical psychologists[3] to the fifty-seven subjects on an individual basis. The data on each of the subjects were evaluated clinically by four psychologists and judgments were made on the basis of this evaluation concerning psychological impairment due to brain damage, personality, and emotional functioning, potential prognosis, and recommendations.

The psychological evaluation form used in this study is a modification of a National Institute of Dental Research Form, DE-01836[4], developed and utilized to codify important variables relating to patient behavior. The modified form appears in the Appendix and, in this study, is referred to as the Clinical Examination Form.

The methodology employed in completing the assessment and making the clinical judgments necessary in each of the behavioral categories was to assign one-fourth of the completed test batteries to each of the four participating judges. Each made independent judgments based on the data and marked the appropriate categories on the Clinical Evaluation Form. Following this, the judges, two of whom had participated in the administration of the tests and two who had not, discussed each subject individually and arrived at a consensus on each of the categories of the Clinical Evaluation Form. This consensus served as the basis on which all subsequent statements relative to psychological variables were made. It should be pointed out at this time that, where clinical

---

[3]All tests were administered and interpreted by Thomas W. Jefferson, Ph.D., Clinical Psychologist, Miami-Dade Junior College, North Campus, and Norman Reichenberg, Ph.D., Clinical Psychologist, Miami, Florida. In addition, Neil Burns, M.S., and John Losak, Ph.D., also participated in the clinical evaluation of the tests.

[4]The form was initially designed for research with the cleft palate child.

judgments are made on a consensus basis, certain minor discrepancies in data are apt to occur as a result of the technique itself.

A further factor which has to be taken into account in interpreting this data is that both diagnositic categories and functioning students are being considered. Thus, it is possible, for example, to categorize a person as mildly anxious and has having a mild ego defect, yet, at the same time, judge his overall emotional adjustment to be moderately disabling rather than mildly disabling.

RESULTS

The data which follow were derived from a consensus of the four participating judges on each category of the Clinical Evaluation Form for each subject in the population. The results are presented in tabular form, and are reported in terms of percentages.

Table 1 (see page 9) reports the distribution of Verbal I.Q., Performance I.Q., and Full Scale I.Q. Wechsler's Adult Intelligence Scale (WAIS) was used to obtain I.Q.'s for this study and the classification scheme is listed below.[1]

I.Q.	Classification
130 and above	Very Superior
120 - 129	Superior
110 - 119	Bright Normal
90 - 109	Average
80 - 89	Dull Normal
70 - 79	Borderline
69 and Below	Mental Defective

Analysis of Table 1 reveals that fifty-two subjects, representing 91.3 per cent of the population, obtained a Verbal I.Q. of Average or higher. Fifty subjects, representing approximately 89 per cent of the population, obtained a Performance I.Q. of Average or higher. The

---

[1] David Wechsler. Manual for the Wechsler Adult Intelligence Scale. (New York: The Psychological Corporation, 1955) p. 20.

distribution also reveals that fifty-three subjects, or 93 per cent of the population, obtained a Full Scale I.Q. of Average or higher.

The fact that 91.3 per cent of the population obtained a Verbal I.Q. in the Average or higher range is significant since a criterion for participation in the study was to score in the lowest quartile on the Verbal section of the School and College Ability Test. It would appear that, based on the verbal intellectual capacity as measured by the WAIS, the majority of these students have the potential to succeed in some type of college-level program. This contention is further supported, especially at a junior college level, since 93 per cent of the population obtained a Full Scale I.Q. in the Average or higher range.

TABLE I

Distribution of Intelligence Quotients as Measured

By Wechsler Adult Intelligence Scale

I.Q. RANGE	Verbal I.Q.		Performance I.Q.		Full Scale I.Q.	
	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	1	1.8	0	0.0	1	1.8
80 - 89	4	7.0	7	12.3	3	5.3
90 - 99	15	26.3	18	31.6	16	28.0
100 - 109	26	45.6	17	29.8	23	40.4
110 - 119	9	15.9	12	21.1	13	22.7
120 - 129	2	3.5	2	3.5	1	1.8
130 +	0	0.0	1	1.8	0	0.0
TOTALS	57	100.1	57	100.1	57	100.0

Table 2 (see page 11)reports the distribution of Verbal, Performance, and Full Scale I.Q.'s by sex. There were thirty-four males and twenty-three females in the study.

Analysis of Table 2 reveals that no male subjects scored below Average on the Verbal Scale, while 21.7 per cent of the female subjects (N = 5) scored below Average. On the Performance Scale, one male subject and six female subjects scored below Average.

None of the male subjects obtained a Full Scale I.Q. below Average, while four of the female subjects scored below Average.

Approximately 35 per cent of the males (N = 12) obtained Full Scale I.Q. scores of 110 or higher, and 8.7 per cent of the females (N = 2) obtained Full Scale I.Q. scores of 110 or higher.

It is highly significant that 25 per cent of the population obtained Full Scale I.Q.'s of 110 or higher, yet scored in the lowest quartile of the SCAT Verbal.

TABLE 2

Distribution of Intelligence Quotients By Sex

As Measured By WAIS

I.Q. RANGE	VERBAL I.Q.				PERFORMANCE I.Q.				FULL SCALE I.Q.			
	Male		Female		Male		Female		Male		Female	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	1	4.3	0	0.0	0	0.0	0	0.0	1	4.3
80 - 89	0	0.0	4	17.4	1	2.9	6	26.1	0	0.0	3	13.0
90 - 99	7	20.6	8	34.9	7	20.6	11	47.8	5	14.7	11	47.8
100 - 109	19	55.9	7	30.4	13	38.2	4	17.4	17	50.0	6	26.1
110 - 119	6	17.6	3	13.0	10	29.4	2	8.7	11	32.4	2	8.7
120 - 129	2	5.9	0	0.0	2	5.9	0	0.0	1	2.9	0	0.0
130 +	0	0.0	0	0.0	1	2.9	0	0.0	0	0.0	0	0.0
TOTALS	34	100.0	23	100.0	34	99.9	23	99.9	34	100.0	23	99.9

Results in Table 3 (see page13) represent the distribution of I.Q.'s for male subjects according to their ethnic background. Of the thirty-four males in the population, six were of Latin background, four were Negro, and twenty-four were Caucasian.

None of the male subjects obtained Verbal I.Q.'s below Average. All of the Negro males scored within the Average Verbal range. Two Latin males and six Caucasian males scored above Average while no Negro males scored in the above Average category.

On the Performance I.Q. Scale, only one subject, a Negro, scored below Average. On a percentage basis, more Caucasian males scored above Average than did the Latin males. None of the Negro males scored above Average.

No male subject obtained Full Scale I.Q.'s below Average. All of the Negro males scored within the Average range, while two Latin males and ten Caucasian males obtained Full Scale I.Q.'s of 110 or higher.

On a percentage basis, Latin male subjects obtained higher Full Scale scores than did Caucasian or Negro males. All of the Latin males (N = 6) obtained a Full Scale I.Q. of 100 or higher, while approximately 87 per cent of the Caucasian males (N = 21) and only 50 per cent of the Negro males (N = 2) obtained a Full Scale I.Q. of 100 or higher.

TABLE 3

Distribution of Intelligence Quotients as Measured by WAIS

For Males According to Ethnic Background

.Q. RANGE	VERBAL I.Q.						PERFORMANCE I.Q.						FULL SCALE I.Q.					
	LATIN		NEGRO		CAUCASIAN		LATIN		NEGRO		CAUCASIAN		LATIN		NEGRO		CAUCASIAN	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
80 - 89	0	0.0	0	0.0	0	0.0	0	0.0	1	25.0	0	0.0	0	0.0	0	0.0	0	0.0
90 - 99	0	0.0	3	75.0	4	16.7	1	16.7	1	25.0	5	20.8	0	0.0	2	50.0	3	12.5
00 - 109	4	66.6	1	25.0	14	58.3	3	50.0	2	50.0	8	33.3	4	66.6	2	50.0	11	45.8
10 - 119	1	16.7	0	0.0	5	20.8	1	16.7	0	0.0	9	37.5	1	16.7	0	0.0	10	41.7
20 - 129	1	16.7	0	0.0	1	4.2	0	0.0	0	0.0	2	8.4	1	16.7	0	0.0	0	0.0
30 +	0	0.0	0	0.0	0	0.0	1	16.7	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	6	100.0	4	100.0	24	100.0	6	100.1	4	100.0	24	100.0	6	100.0	4	100.0	24	100.0

Table 4 (see page 15)represents the distribution of I.Q.'s for female subjects according to ethnic background. No Latin females were in the study, therefore the following results are descriptive of Caucasian females (N = 6) and Negro females (N = 17).

Results on the Verbal Scale reveal that none of the Caucasian females scored below 90 I.Q., while five Negro females scored below 90. One Caucasian female scored above Average, while two Negro females scored above Average. Five Caucasian females obtained an I.Q. in the Average range, while ten Negro females scored within this range.

Results on the Performance Scale reveal that no Caucasian females scored below 90 I.Q., while six Negro females scored below 90 I.Q. One subject in each ethnic group scored 110 or higher. Ten Negro females obtained a score in the Average range, while five Caucasian females obtained I.Q.'s within this range.

Four Negro females obtained a Full Scale I.Q. below 90; none of the Caucasian females scored below 90. Twelve Negro females obtained a score within the Average range, while five Caucasian females scored within the Average range. One subject in each ethnic group scored above Average.

On a percentage basis, Caucasian females obtained higher Full Scale scores than did Negro females. All of the Caucasian females (N = 6) obtained scores of Average or higher, while 76 per cent of the Negro females (N = 13) obtained scores of Average or higher.

TABLE 4

Distribution of Intelligence Quotients as Measured by WAIS

For Females According to Ethnic Background

I.Q. RANGE	VERBAL I.Q.				PERFORMANCE I.Q.				FULL SCALE I.Q.			
	NEGRO		CAUCASIAN		NEGRO		CAUCASIAN		NEGRO		CAUCASIAN	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	1	5.9	0	0.0	0	0.0	0	0.0	1	5.9	0	0.0
80 - 89	4	23.5	0	0.0	6	35.3	0	0.0	3	17.6	0	0.0
90 - 99	7	41.2	1	16.7	10	58.8	1	16.7	10	58.8	1	16.7
100 - 109	3	17.6	4	66.6	0	0.0	4	66.6	2	11.8	4	66.6
110 - 119	2	11.8	1	16.7	1	5.9	1	16.7	1	5.9	1	16.7
120 - 129	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	17	100.0	6	100.0	17	100.0	6	100.0	17	100.0	6	100.0

Of the total population, approximately 20 per cent (N = 11) were judged to have some degree of organicity. Table 5 summarizes these results.

Two subjects in this category obtained Full Scale I.Q.'s below Average. Eight subjects obtained a Full Scale I.Q. within the Average range. One subject earned an above Average Full Scale I.Q.

TABLE 5

Judgment of Psychological Impairment Related

To Organic Brain Damage

FULL SCALE WAIS I.Q.	Psychological Impairment* Indicated		Psychological Impairment Not Indicated	
	N	Per Cent	N	Per Cent
70 - 79	1	1.8	0	0.0
80 - 89	1	1.8	2	3.5
90 - 99	5	8.8	11	19.3
100 - 109	3	5.3	20	35.1
110 - 119	1	1.8	12	21.0
120 - 129	0	0.0	1	1.8
130 +	0	0.0	0	0.0
TOTALS	11	19.3	46	80.7

*See Clinical Evaluation Form in Appendix for categories of impairment.

Table 6 (see page 18) summarizes the clinical judgments relating to anxiety as a variable in personality and emotional functioning.

Anxiety was of questionable significance for approximately 25 per cent of the population. Thirty-seven per cent of the population (N = 21) exhibited anxiety in the mild category. The subjects in this category obtained a Full Scale score within the Average I.Q. range, except for four subjects who scored within the 110 - 119 Full Scale I.Q. range.

Approximately 32 per cent of the population (N = 18) exhibited anxiety described as moderate. Two subjects in this category obtained a Full Scale I.Q. below Average, fourteen subjects scored within the Average range, and two subjects scored above Average.

Four subjects, representing seven per cent of the population, exhibited anxiety described as moderate to severe. One subject scored below Average, two subjects scored within the Average range, and the remaining subject scored in the Bright Normal range.

There was no clinical evidence to support a judgment of severe anxiety for any of the subjects.

The data in Table 6 indicate that at least 75 per cent of the population (N = 43) were judged to exhibit anxiety to a degree that would interfere with personality and emotional functioning.

TABLE 6

Judgment of Anxiety As A Variable in Personality and Emotional Functioning

FULL SCALE WAIS I.Q.	OF QUESTIONABLE SIGNIFICANCE		MILD		MODERATE		MODERATE TO SEVERE		SEVERE	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0
80 - 89	0	0.0	0	0.0	2	3.5	1	1.8	0	0.0
90 - 99	3	5.3	5	8.8	6	10.5	2	3.5	0	0.0
100 - 109	3	5.3	12	21.0	8	14.0	0	0.0	0	0.0
110 - 119	6	10.5	4	7.1	2	3.5	1	1.8	0	0.0
120 - 129	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	14	24.6	21	36.9	18	31.5	4	7.1	0	0.0

Table 7 (see page 20) summarizes clinical judgments relating to ego defects as a variable in personality and emotional functioning.

Results in Table 7 indicate that approximately 95 per cent of the population (N = 54) were judged to have ego defects of varying degree. Four of these subjects obtained a Full Scale I.Q. below Average.

Seventy-two per cent of the population (N = 41) were judged to have more serious problems related to identification, role confusion, or psychosexual and authority conflicts. These subjects were judged to exhibit ego defects to a degree that would interfere with personality and emotional functioning.

TABLE 7

Judgment of Ego Defects* as a Variable in Personality and Emotional Functioning

FULL SCALE WAIS I.Q.	OF QUESTIONABLE SIGNIFICANCE		MILD		MODERATE		MODERATE TO SEVERE		SEVERE	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0
80 - 89	0	0.0	0	0.0	1	1.8	1	1.8	1	1.8
90 - 99	1	1.8	2	3.5	4	7.0	9	15.8	0	0.0
100 - 109	0	0.0	9	15.8	10	17.5	4	7.0	0	0.0
110 - 119	2	3.5	3	3.5	5	8.8	4	7.0	0	0.0
120 - 129	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	3	5.3	13	22.8	22	38.7	18	31.6	1	1.8

*Ego Defects -- problems relating to identification, role confusion, and unresolved psychosexual and authority conflicts.

Table 8 (see page 22)reports clinical judgments of overall personality and emotional adjustment. For purposes of this study, adjustment was defined as freedom from undue anxiety and serious ego defects (cf. - Clinical Examination Form for further definition of anxiety and ego defects).

Analysis of Table 8 reveals that 10.5 per cent of the population (N = 6) were judged to exhibit good adjustment. All subjects in this category obtained a Full Scale I.Q. of Average or above.

Ten subjects (17.6 per cent) were judged to be mildly disturbed. Of these, eight subjects scored in the Average range, and two subjects scored above Average.

Approximately half of the population (N = 29) were judged to be moderately disturbed. Of these, nine subjects scored above Average, eighteen scored in the Average range, and two subjects scored below Average.

Almost 20 per cent of the population (N = 11) were judged to be moderately to severely disturbed. One subject in this category scored above Average, nine scored in the Average range,and one scored below Average.

One subject, who obtained a Full Scale I.Q. below Average, was judged to be severely disturbed.

The results in Table 8 reveal that approximately 72 per cent of the population (N = 41) were judged to fall into the categories of moderately disturbed, moderately to severely disturbed, or severely disturbed. Four of these subjects obtained a Full Scale I.Q. below Average.

TABLE 8

Judgment of Overall Personality and Emotional Adjustment*

FULL SCALE WAIS I.Q.	Good Adjustment N	Per Cent	Mildly Disturbed N	Per Cent	Moderately Disturbed N	Per Cent	Moderately to Severely Disturbed N	Per Cent	Severely Disturbed N	Per Cent
70 - 79	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0
80 - 89	0	0.0	0	0.0	1	1.8	1	1.8	1	1.8
90 - 99	2	3.5	1	1.8	8	14.0	5	8.8	0	0.0
100 - 109	2	3.5	7	12.3	10	17.5	4	7.0	0	0.0
110 - 119	2	3.5	2	3.5	8	14.0	1	1.8	0	0.0
120 - 129	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	6	10.5	10	17.6	29	50.9	11	19.3	1	1.8

*Adjustment: Freedom from undue anxiety and serious ego defects.

Table 9 (see page 24) reports judgments of competitive potential in academic and vocational areas under reasonably ideal circumstances. An index of estimated potential was arrived at by judging the degree of intellectual impairment having a psychogenic basis. Comparisons were made between the obtained Full Scale I.Q. and the estimated potential I.Q.

Approximately 18 per cent of the population (N = 10) were judged to be above Average in competitive potential. Nine of these subjects obtained Full Scale scores in the Bright Normal range. The remaining subject scored in the Superior range.

Approximately half of the population (N = 29) were judged to be Average in competitive potential. Of these, four subjects scored in the Bright Normal range.

Almost 32 per cent of the population (N = 18) were judged to potentially compete at 10 to 30 per cent of Average. Four of these scored below 90 I.Q. The remaining fourteen subjects scored in the Average I.Q. range.

TABLE 9

Judgment of Competitive Potential in Academic/Vocational Areas, Under Reasonably Ideal Circumstances

OBTAINED FULL SCALE WAIS I.Q.	Estimated at Above Average		Estimated at Average		Estimated at 10-30% of Average		Estimated at 30-50% of Average		Estimated below 50% of Average	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0
80 - 89	0	0.0	0	0.0	3	5.3	0	0.0	0	0.0
90 - 99	0	0.0	6	10.5	10	17.5	0	0.0	0	0.0
100 - 109	0	0.0	19	33.3	4	7.0	0	0.0	0	0.0
110 - 119	9	15.8	4	7.0	0	0.0	0	0.0	0	0.0
120 - 129	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	10	17.6	29	50.8	18	31.6	0	0.0	0	0.0

Table 10 (see page 26) reports the range of estimated intellectual potential, assuming good emotional maturity.

One subject's intellectual potential was estimated to be in the Very Superior range, although his obtained Full Scale I.Q. was in the Superior range.

Approximately 16 per cent of the population (N = 9) were judged to have a potential in the Superior intellectual range. One subject obtained a Full Scale I.Q. in the 100 - 109 range. The remaining eight subjects scored in the Bright Normal range.

Thirty-two per cent of the population (N = 18) were judged as having a Bright Normal potential. Of these, three subjects scored between 90 - 99, ten subjects scored between 100 - 109, and five subjects scored in the Bright Normal category.

Approximately 46 per cent of the population (N = 26) were judged to have a potential in the Average intellectual range. Twelve of these subjects scored between 100 - 109, thirteen subjects scored between 90 - 99, and one scored between 80 - 89.

Three subjects, or 5.3 per cent of the population, were judged to have a potential in the Dull Normal range. One of these obtained a Full Scale I.Q. in the 70 - 79 range; the other two subjects obtained a score in the 80 - 89 Full Scale I.Q. range.

No one in the population was judged as having lower than Dull Normal potential.

Further analysis of Table 10 reveals that almost 44 per cent of the population (N = 25) were judged capable of functioning in a higher intellectual range than the obtained I.Q. scores indicate.

TABLE 10

Estimated Intellectual Potential Assuming Good Emotional Maturity

OBTAINED FULL SCALE WAIS I.Q.	Very Superior (I.Q. above 130)		Superior (I.Q. 120-129)		Bright Normal (I.Q. 110-119)		Average (I.Q. 90-109)		Dull Normal (I.Q. 80-89)		Borderline Retarded (I.Q. 70-79)	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0
80 - 89	0	0.0	0	0.0	0	0.0	1	1.8	2	3.5	0	0.0
90 - 99	0	0.0	0	0.0	3	5.3	13	22.8	0	0.0	0	0.0
100 - 109	0	0.0	1	1.8	10	17.5	12	21.1	0	0.0	0	0.0
110 - 119	0	0.0	8	14.0	5	8.8	0	0.0	0	0.0	0	0.0
120 - 129	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	1	1.8	9	15.8	18	31.6	26	45.7	3	5.3	0	0.0

Table 11 (see page 28) summarizes judgments of potential levels of academic achievement. These judgments were based on a balancing of cognitive functioning with emotional and personality factors.

One subject, functioning in the Superior Full Scale I.Q. range, was judged capable of completing his education through the graduate school level.

Approximately 18 per cent of the population (N = 10) were judged capable of graduating from a four-year college. Nine of these subjects obtained a Full Scale score in the Bright Normal range. The remaining subject scored within the Average range.

Fifty-four per cent of the population (N = 31) were judged capable of completing their education through the junior college level. Except for four subjects who scored in the Bright Normal range, the subjects in this category scored within the Average range.

Approximately 26 per cent of the population (N = 15) were judged not capable of academic achievement at junior or senior college level. Four of these subjects scored below Average intelligence and, on this basis, it was felt they could not academically achieve beyond the high school level.

For an additional eleven subjects who scored within the Average range, the consensus indicated that the degree of emotional disturbance was of such magnitude as to preclude successful handling of college-level work.

TABLE 11

Judgment of Potential Levels of Academic Achievement

(Based on a Balancing of Cognitive and Emotional Functioning)

OBTAINED FULL SCALE WAIS I.Q.	Graduate School		4-year College		Junior College		9th-12th Grade	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	0	0.0	1	1.8
80 - 89	0	0.0	0	0.0	0	0.0	3	5.3
90 - 99	0	0.0	0	0.0	8	14.0	8	14.0
100 - 109	0	0.0	1	1.8	19	33.3	3	5.3
110 - 119	0	0.0	9	15.3	4	7.0	0	0.0
120 - 129	1	1.8	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	1	1.8	10	17.6	31	54.3	15	26.4

Table 12 (see page 30) summarizes judgments of maximum future vocational level of achievement.

One subject was judged capable of achieving a maximum future vocational level in the professional (graduate and post-graduate) category. This subject obtained a Full Scale score in the Superior range.

Maximum future vocational potential could be professional (4-year college) for 15.8 per cent of the population (N = 9). Eight subjects in this category scored in the Bright Normal range. The remaining subject scored in the Average I.Q. range.

Approximately 53 per cent of the population (N = 30) were judged capable of achieving a vocational level in the white collar or skilled technical category. Of these, twenty-five subjects obtained a Full Scale score in the Average range, and five subjects scored in the Bright Normal range.

Twenty-three per cent of the population (N = 13) were judged capable of achieving a vocational level in the blue collar category. One subject in this category scored in the Dull Normal range. The other twelve subjects scored in the Average I.Q. range.

Seven per cent of the population (N = 4) were judged capable of achieving a vocational level in the unskilled laborer category. One of these subjects scored in the Average I.Q. range. The remaining subjects (N = 3) scored below Average.

No subjects appeared in the non-competitive (residential or sheltered workshop) category.

TABLE 12

Judgment of Maximum Future Vocational Level of Achievement

(Based on a Balancing of Cognitive Functioning with Emotional and Personality Factors)

OBTAINED FULL SCALE WAIS I.Q.	Professional (Graduate and Post Graduate)		Professional (4 year college)		White Collar Skilled Technical		Blue Collar		Skilled Laborer		Unskilled Laborer		Non-Competitive (residential or sheltered workshop	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0
80 - 89	0	0.0	0	0.0	0	0.0	1	1.8	0	0.0	2	3.5	0	0.0
90 - 99	0	0.0	0	0.0	6	10.5	9	15.8	0	0.0	1	1.8	0	0.0
100 - 109	0	0.0	1	1.8	19	33.3	3	5.3	0	0.0	0	0.0	0	0.0
110 - 119	0	0.0	8	14.0	5	8.8	0	0.0	0	0.0	0	0.0	0	0.0
120 - 129	1	1.8	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	1	1.8	9	15.8	30	52.6	13	22.8	0	0.0	4	7.0	0	0.0

Table 13 (see page 32) reports recommendations for further academic and/or vocational training.

Only one subject was considered to be able to succeed in an academic field or vocational setting of his own choosing, at whatever level. This subject scored in the Bright Normal range.

Forty-four per cent of the population (N = 25) were recommended for a regular educational setting. Thirteen of the subjects in this category obtained a Full Scale score in the Average range, and one subject scored in the Superior range.

Approximately nine per cent (N = 5) were recommended for vocational training. All of these subjects scored in the Average I.Q. range.

Twenty-nine per cent (N = 17) were recommended for a modified educational curriculum with vocational goals. One of these scored in the Bright Normal range, while the remaining subjects scored in the Average range.

Further formal education or vocational training was not indicated for 16 per cent of the population (N = 9). Five subjects in this category scored in the Average I.Q. range. The remaining four subjects obtained a Full Scale score below Average.

No one was recommended for placement in an "on-the-job" setting which required future academic and/or vocational training.

TABLE 13

Recommendations Regarding Future Academic and/or Vocational Training

OBTAINED FULL SCALE WAIS I.Q.	A Field or Setting of Student's Choice		An "On The Job" Setting		A Regular Academic Setting		Vocational Training		Modified Educational Curriculum with Vocational Goals		Further Formal Education or Vocational Training Not Indicated	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	1.8
80 - 89	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	3	5.3
90 - 99	0	0.0	0	0.0	3	5.3	3	5.3	6	10.5	4	7.0
100 - 109	0	0.0	0	0.0	10	17.5	2	3.5	10	17.5	1	1.8
110 - 119	1	1.8	0	0.0	11	19.3	0	0.0	1	1.8	0	0.0
120 - 129	0	0.0	0	0.0	1	1.8	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	1	1.8	0	0.0	25	43.9	5	8.8	17	29.8	9	15.9

Table 14 (see page 34)reports recommendations regarding the need for counseling or psychotherapy.

Counseling or psychotherapy was recommended for 40 per cent of the population (N = 23). Although five of the subjects appeared to be adequately adjusted, counseling was recommended to speed maturity and improve basic strengths. Psychotherapy was recommended for the other eighteen subjects in order for them to reach their educational goals.

Psychotherapy was contra-indicated for 14 per cent of the population (N = 8) because the nature of their ego and situational problems suggested chronic emotional disturbance. It was believed that these subjects would be inaccessible to psychotherapeutic intervention.

Psychotherapy was not suggested for 46 per cent of the population (N = 26). Although it was believed that subjects in this category could profit from counseling or psychotherapy, their functioning in an educational setting was judged to be not directly related to any anticipated outcomes of psychotherapeutic intervention.

TABLE 14

Recommendations Regarding Need For Counseling or Psychotherapy

OBTAINED FULL SCALE WAIS I.Q.	Definitely Recommended[1]		Needed and Necessary[2]		Not Recommended[3]		Not Suggested[4]	
	N	Per Cent	N	Per Cent	N	Per Cent	N	Per Cent
70 - 79	0	0.0	0	0.0	0	0.0	1	1.8
80 - 89	0	0.0	1	1.8	0	0.0	2	3.5
90 - 99	0	0.0	5	8.9	5	8.8	6	10.5
100 - 109	2	3.5	8	14.0	2	3.5	11	19.3
110 - 119	2	3.5	4	7.0	1	1.8	6	10.5
120 - 129	1	1.8	0	0.0	0	0.0	0	0.0
130 +	0	0.0	0	0.0	0	0.0	0	0.0
TOTALS	5	8.8	8	14.0	18	31.6	26	45.6

1. Prognosis in therapy is good to excellent, anxiety, and conflicts can be resolved and good basic strengths improved.

2. Therapy needed and necessary prior to student reaching his educational goals.

3. Student inaccessible and because of the nature of ego and situational problems might best be left alone.

4. Although the student may be able to profit from psychotherapy, his functioning in an educational situation is judged not to be directly related to any anticipated outcomes of psychotherapy.

DISCUSSION

Perhaps the most interesting aspect of the homogeneous group, defined as "those individuals scoring at or below the twenty-first percentile on the Verbal section of the School and College Ability Test," is its actual lack of homogeneity. Not only are there known economic, social, and cultural differences present, but also psychological, emotional, and intellectual differences, which to one degree or another, are contributing to successful or unsuccessful academic performance. In reality, the homogeneity of the group is illusory, with the exception that each individual scored within the lowest twenty-first percentile on a given test.

It is likely that curricula determined by an illusion of homogeneity have contributed in no small measure to the failure of many students at Miami-Dade Junior College (and perhaps elsewhere). Curriculum planning has not examined adequately, or has failed to take into consideration, significant psychological variables, i.e., emotional stability, personality integration, and detailed knowledge of the individual's intellectual functioning. This is especially the case as these psychological variables relate to teaching techniques and planning and development of curricula.

It can be discerned readily from Table 1 that nearly all of the students participating in this study scored in the Average or higher range when measured with an individually administered intelligence test. Even so, there are wide and significant functional differences to be found from individual to individual and within the same individual.

Table 2 points out some of the group differences based on Verbal, Performance, and Full Scale scores on the Wechsler Adult Intelligence Scale. Moreover, when individual profiles and subtest scores are examined, other differences also become apparent. For example, many individuals who scored within the Average range on the three WAIS scales scored considerably below the mean on one subtest and considerably above the mean on another subtest. An evaluation of these differences could have important implications for teaching techniques, such as method of presentation of material.

When estimates of intellectual potential are compared with actually obtained I.Q. scores (cf. Tables 1 and 10), there is a general upward trend in I.Q. scores, with 25 individuals of the population of 57 moving into a higher I.Q. range. This represents approximately 44 per cent of the entire population and appears to reflect adverse, environmentally determined causal factors which depress the obtained I.Q. scores. This inference suggests that,with amelioration of emotional conflict and/or environmental manipulation, these students are potentially capable of functioning at a level somewhat higher than the obtained I.Q. scores indicate.

The upward trend indicated in Table 10 is perhaps more significant when considered in relation to Table 5 which revealed that eleven individuals were judged to have possible impairment of intellectual functioning due to brain damage. Because of the theoretically unalterable nature of brain damage, it is not anticipated that this group would have greater potential than that indicated by the obtained I.Q. scores. Indeed, when individual records on each of the eleven subjects in this group were examined, it was found that nine of them were not judged to have a potential

higher than their obtained I.Q. scores. In both cases where potential I.Q. was judged to be higher than that of the obtained I.Q., each had been judged as having "questionable" brain damage.

When these nine subjects are eliminated from the total population, reducing it to 48, the percentage of those moving to a higher I.Q. range rises from 44 per cent to approximately 52 per cent. Stated in other terms, 52 per cent of the population studied have the potential to function at a higher level if the significant psychological and/or environmental factors inhibiting academic performance can be isolated and appropriately dealt with. The problem of planning within the junior college for the 15 per cent who were judged to have some degree of organic impairment in the area of intellectual functioning is an important curriculum decision.

What are some of the specific psychological factors which appear to be related to successful handling of college work? Certainly, anxiety would appear to be an important variable since 43 of the 57 subjects did exhibit anxiety to a degree which was judged severe enough to cause some interference with personality and emotional functioning. Ego defects, or presence of problems related to role confusion, identification, unresolved psychosexual conflict, and authority conflicts, appear to constitute another area of concern as related to personality and emotional functioning. A total of 41 individuals, representing 72 per cent of the population, were judged to be moderately to severely disturbed. In view of this, the issue of psychological adjustment certainly can not be ignored in providing for the junior college student.

Two basic questions need to be asked at this point: (1) Is it feasible to gather and sort information on which to form significantly

different groups; (2) What educational methods could be developed and/or implemented to produce significant differences in the individual's chance for success, over and above that accruing from the traditional methods now practiced in most schools and colleges?

The answer to the first question, based on the present research, appears to be affirmative. Although it is difficult to assess large numbers of students, it does not appear impossible to categorize students in terms of selected and presumably significant variables through employment of group tests. Considerable study is necessary to construct a battery that would not be too time-consuming or too unwieldy, yet would yield the data necessary for more successful student groupings.

Based on the present study, an optimal testing program would be expected to provide information in the following areas: (1) both verbal and non-verbal aspects of intelligence, (2) a measurement of anxiety, (3) an evaluation of overall emotional adjustment, (4) a measurement of academic skills, (5) a measurement of organicity. Group tests are available in most of these areas. As stated previously, it would require careful analysis of each test under consideration to determine which would provide the most relevant and readily applicable information.

Answers to the second question are less clear-cut. It would require considerable imagination, innovativeness and ingenuity, along with controlled experimentation, to develop an instructional program and curriculum based on the information uncovered through the detailed testing program. For example, a significant percentage of the male population of this study scored in the above Average categories on the WAIS Performance Scale. What programming and teaching techniques can be instituted so that this ability can be utilized productively? As another example, there

are significant differences among the ethnic groups studied as indicated in Table 3. Negro males consistently scored low in the Performance areas,while Verbal scores, though higher than Performance scores, were all within the low Average to Average range. Further study is indicated at this point to determine why this particular segment of the population scored as it did and what curricular or instructional changes can be made to correct the problem. Traditionally the tendency has been to guide the alleged "non-verbal" Negro male student into the technical, non-academic areas. The results of this study, however, indicate that this would be a poor choice in as much as the Performance scores were lower than Verbal.

A number of proposals or suggestions can be offered. These are not to be considered as final, in any sense, but as points of departure for further research and experimentation.

1. Since 16 per cent of the remedial population do not appear capable of academic achievement at a junior college level, perhaps a program of counseling would help these individuals evaluate their capabilities and guide them into areas of work or training where their chance of success can be greater than that in a junior college.
2. Since a high percentage of the population was judged as mildly to severely disturbed on overall personality and emotional functioning, some form of psychotherapeutic intervention appears warranted for these students in order to help them better handle their psychological conflicts and thereby increase their chances of attaining meaningful educational and vocational goals.

3. Since a high percentage of the population appear weak in verbal ability, perhaps those who have poor language facility could be grouped together in a curriculum which would utilize a multisensory approach.
4. Since many students appear to be weak in generalizing and abstracting ability, they could be directed into relatively non-verbal areas and provided enrichment and survey type courses geared at a lower level.
5. Since the brain damaged individual requires a highly individualized program, he would be taught in a relatively quiet, non-stimulating environment, such as in an individual carrel, equipped with earphones and other audio-visual devices.

Perhaps the most significant implication based on the heterogeneity of the sample is for greater diversity of courses at the junior college level, and for courses with different levels of difficulty well beyond the scope of those now provided.

SUMMARY AND RECOMMENDATIONS

The purpose of this study was to gather information and data that could be synthesized into a description of that group of students at Miami-Dade Junior College,North Campus, who score at or below the twenty-first percentile on the Verbal section of the School and College Ability Test, Form 1A. More specifically, this study was designed to identify variables that contribute to the students' lack of success at the College and to recommend approaches to curriculum innovations for the College to consider in working with these academically underprepared students.

Students eligible to participate in this study were required to meet the following criteria:

1. Score at or below the twenty-first percentile on the Verbal section of the School and College Ability Test, Form 1A.
2. Enroll in Orientation 101 and English 090 (Remedial Reading-Writing) during the Fall Term, 1967.
3. Be first-time-in-college freshmen who registered for 12 or more credit hours.

A group of approximately 100 students who met the above criteria were selected to become the population for this study. Of the initial group who signed a "Participation Agreement," 57 completed testing. The results reported are descriptive of 34 males (6 of Latin background, 4 Negro, and 24 Caucasian) and 23 females (17 Negro and 6 Caucasian).

A battery of psychological tests was administered to the 57 students on an individual basis by two clinical psychologists. The test battery consisted of the Wechsler Adult Intelligence Scale, the Bender Visual Motor Gestalt Test, and the House-Tree-Person Projective Test. The data on each of the 57 subjects were evaluated by four clinical psychologists, two of whom had administered the tests. Judgments were made on the basis of their evaluations and were reported on a modification of a National Institute of Dental Health Research Form, DE-018360. Aside from the fact that each individual scored at or below the twenty-first percentile on an achievement test, the findings revealed that any homogeneity of the population is illusory.

Since a criterion for participation in the study was to score at or below the twenty-first percentile on an achievement test, it is significant that 93 per cent of the population obtained a Full Scale WAIS I.Q. of Average or above. Differences were found within individuals on subtest scores along with group differences with respect to sex and ethnic background. None of the male subjects obtained a Full Scale I.Q. below Average, while 17.3 per cent (N = 4) of the females, all of whom were Negro, scored below Average.

Results from the complete test battery were used to make estimates of intellectual potential. When these estimates were compared with obtained I.Q. scores, there was a general upward trend in I.Q. scores for 29 subjects. This phenomenon does not include 11 individuals who were suspected of possible impairment of intellectual functioning as a result of organic brain damage.

At least 72 per cent of the population were judged to be sufficiently disturbed to warrant psychotherapeutic intervention.

Approximately 71 per cent of the population were judged to have problems relating to identification, role confusion, or psychosexual and authority conflicts. These subjects were judged to exhibit ego defects to a degree that would interfere with psychological functioning. These findings clearly indicate that a high percentage of the population is in need of some form of counseling or psychotherapy to help them better cope with psychological conflicts,thereby increasing chances of realizing their maximum potential.

The data supplied useful information for making judgments of potential academic and vocational levels of attainment. These judgments were made through a balancing of cognitive and emotional functioning. Even though all of the subjects were enrolled in a junior college at the time of this study, at least 26 per cent of these students were judged not to have the intellectual or emotional integration to successfully profit from this experience unless the necessary modifications in the present curriculum structure are provided to meet these needs.

Based on the findings of this study, several suggestions can be offered. First, there appears to be an urgent need to use new approaches for gathering and sorting out information on which to group students. One such approach is through differential diagnosis and placement. It will be more difficult to assess larger numbers of students, but it does not appear impossible to sort students in terms of selected variables through employment of group tests.

Second, educational experiences need to be developed which emphasize attention to personal problems. These experiences should produce a significant difference in the chance for success of these students over and above that accruing from traditional methods.

Finally, there appears to be a need for continuous experimentation,

research, and evaluation in working with academically underprepared students if the College is to continue to assist them in reaching optimal growth and development.

APPENDIX

OBJECTIVES FOR REMEDIAL READING-WRITING (ENGLISH 090)

General Objectives: The course should enable the student:

1. To gain greater self-confidence in reading and to derive more pleasure from it.
2. To make significant progress toward achieving an average college freshman level reading rate with average comprehension.
3. To improve his ability to listen and to follow directions as well as to upgrade his visualization skills.
4. To acquire an interest in new and unusual words.
5. To achieve flexibility in reading rates in order to adjust rate to reading purpose.

Specific Objectives: The course should enable the student:

1. To identify and correct reading faults that retard his progress (e.g., vocational, lack of concentration, head movements, frequent regressions, etc.).
2. To attack new works through a variety of methods (e.g., context, phonemes, affixes, roots, dictionary, etc.).
3. To locate key words, topic sentences, and main ideas.
4. To make inferences.
5. To become experienced and skillful in taking a variety of timed tests.

6. To grow in ability to read tables, graphs, maps, and charts of different sorts.
7. To be aware of limiting words in sentence reading.
8. To distinguish between a sentence and a sentence fragment and to write simple sentences correctly.
9. To read a minimum of three books with interest and understanding and to report on them.
10. To complete required assignment sheet in Reading Lab.

MIAMI-DADE JUNIOR COLLEGE [redacted] MIAMI, FLORIDA

north campus [redacted] 11380 n. w. 27th avenue
miami, florida 33167

PARTICIPATION AGREEMENT

I hereby agree to participate in a research program at Miami-Dade Junior College, the purposes of which have been fully presented to me.

I understand that I will be required, as part of this research program, to take various visual, hearing and psychological tests.

It is further understood that all information gathered about me, as an individual participant, will be held in strictest confidence and will not become a part of my permanent college record nor influence my status at Miami-Dade Junior College in any manner.

_____
Signature

_____
Student Number

_____
Date

Fall, 1967

south campus [redacted] 11011 s. w. 104th street
miami, florida 33156

miami beach center [redacted] 1410 drexel avenue
miami beach, florida 33139

CLINICAL EXAMINATION FORM*

STUDENT'S NAME _____ AGE: _____

I. COGNITIVE FUNCTIONING

A. Wechsler Scaled Scores:

1. Verbal Scales:

Information	____
Comprehension	____
Arithmetic	____
Similarities	____
Digit Span	____
Digits Forward	____
Digits Reversed	____
Vocabulary	____

2. Performance Scales:

Picture Completion	____
Picture Arrangement	____
Block Design	____
Object Assembly	____
Coding	____

3. Verbal I.Q.: ____

4. Performance I.Q.: ____

5. Full Scale I.Q.: ____

*Modified from N.I.D.R. DE-01836
Copyright 1967

II. PSYCHOLOGICAL IMPAIRMENT ON A BRAIN DAMAGE BASIS:

A. Impairment of any psychological process on a brain damage basis, i.e., consistent with cortical dysfunction regardless of etiology, is:

Absent ____

Questionable ____

Mild ____

Moderate ____

Severe ____

B. Specific psychological processes in which impairment on a brain damage basis appears most evident include (check any number only if impairment is suspected and is so indicated by II-A above):

1. Cognitive processes:

Intellectual - Verbal ____

Intellectual - Non-verbal ____

Perceptual (visual motor coordination) ____

Abstract Reasoning and Integration (verbal or perceptual non-verbal) ____

2. Affective Processes:

Judgment and Emotional Control ____

III. PERSONALITY AND EMOTIONAL FUNCTIONING:

A. Anxiety:

1. Will it interfere with academic adjustment and to what degree?

Of questionable significance _____

Mild _____

Moderate _____

Moderate to severe _____

Severe _____

B. PERSONALITY characteristics and emotional adjustment:

1. Ego defects or disturbance, i.e., related to identification and role confusion, unresolved psychosexual conflicts and/or poorly resolved conflicts with authority figures are:

(Here extreme immaturity, rejection of parental and/or social values, strong acting out potential, e.g., poorly controlled aggressiveness and/or excessive passivity, as well as inadequate reality testing, are all possible examples of ego defects.)

Of questionable significance _____

Mild _____

Moderate _____

Moderate to severe _____

Severe _____

2. Overall personality and emotional adjustment is:

Good ____

Mildly disturbed ____

Moderately disturbed ____

Moderately to severely disturbed ____

Severely disturbed ____

IV. POTENTIAL AND PROGNOSIS:

A. Competitive potential in academic/vocational areas, under reasonably ideal circumstances is estimated at:

Above average ____

Average ____

10 - 30% of average ____

30 - 50% of average ____

Below 50% of average ____

B. From a qualitative standpoint, particularly in view of high point subtest scores, cues regarding cognitive functioning obtained from the projective tests, and if reasonably good emotional maturity occurred, intellectual potential would be estimated as falling within the following range:

(Here the capacity, i.e., the "size of the bucket" should be considered, not the functional ability or how much the bucket now holds.)

Very superior (I.Q. above 130) ____

Superior (I.Q. 120 - 129) ____

Bright Normal (I.Q. 110-119) ____

Average (I.Q. 90 - 109) ____

Dull Normal (I.Q. 80 - 89) ____

Borderline retarded (I.Q. 70 - 79) ____

C. Balancing the evaluation of cognitive functioning with emotional and personality factors, maximum future academic level could be:

(While somewhat 'crystal ballish' the determination of possible achievement potential is important here. Age, current achievement of maximum functioning, extreme or fairly serious emotional problems, and probable inability to change or profit from help should be considered as limiting factors, while the converse might increase the rating.)

Graduate School ____

College (4 year) ____

College (2 year) ____

9th to 12th grade ____

D. In the same manner future vocational potential could be:

Professional (graduate and post-graduate) ____

Professional (4 year college) ____

White collar or skilled technical ____

Blue collar ____

Skilled laborer ____

Unskilled laborer ____

Non-competitive (residential or sheltered workshop) ____

V. RECOMMENDATIONS:

A. Further training (academic and/or vocational might best be conducted in:

A field or setting of the student's choice (i.e., st. has achieved success and is functioning; or potential and emotional integration suggests st. will continue to strive independently). ____

An 'on the job' setting (st. is average or better and has reached educational maximum). ____

A regular educational setting (educational maximum not achieved and st. can compete at least near average). ____

Vocational training ____

Modified educational curriculum with vocational goals ____

Further formal education or vocational training not indicated ____

B. Some form of counseling or psychotherapy is:

Definitely recommended (prognosis in therapy is good to excellent, anxiety and conflicts can be resolved and good basic strengths improved. Therapy should speed maturity). ____

Needed and necessary prior to reaching of educational goals. ____

Not recommended (student inaccessible and because of the nature of ego and situational problems might best be left alone. Include here those individuals where supportive management for severe periodic or chronic emotional disturbance is indicated). ____

Not suggested. ____

REFERENCES

1. Bender, Lauretta, Instructions for the Use of Visual Motor Gestalt Test. (The American Orthopsychiatric Association, Inc.).

2. Buck, John N. Journal of Clinical Psychology. (California: Western Psychological Services, Monograph Supplement No.5), October, 1948.

3. Losak, John G., "An Experiment Designed to Evaluate A Program Developed to Aid the Academically Underprepared Student" (unpublished Ph.D. dissertation, Florida State University, 1969)

4. Weschler, David, Manual for The Weschler Adult Intelligence Scale. (New York: The Psychological Corporation, 1955).